

## APPENDIX B

## BRIEF HISTORY

The U. S. Army Corps of Engineers is unique among the armed forces in that it engages in civil as well as military activities. At the present time its civil functions consist of effecting improvements to rivers, harbors, canals, and other waterways, and of flood control. In carrying out its military duties the Corps of Engineers performs combat as well as service functions. In the service category is the construction of Army and Air Force installations, both in the continental United States and overseas. In combat areas, in time of war, Engineer troops perform such construction. In peacetime and in non-combat areas in wartime, construction of airfields and other military works, like civil works, is normally performed by private industry under contract to the Corps of Engineers.

The Corps' main combat mission is to aid the advance of friendly troops and to impede the advance of the enemy. Roadbuilding and repair, erection of emergency bridges, detection and clearance of land mines are outstanding duties performed by Engineer troops in a forward movement of ground troops. In a defensive, retrograde movement, Engineer troops destroy bridges and employ other means of blocking the routes of communication. Other important duties of the Corps of Engineers are providing staff supervision over Army Topographic matters, providing instruction and materials for camouflage, installing and operating petroleum pipeline systems, and supplying water and other utilities.

The civil and military functions of the Corps of Engineers have evolved over a period corresponding to the development of our Nation. On 16 June 1775, the day before the battle of Bunker Hill, the Continental Congress authorized the appointment of a chief engineer and two assistants for the Grand Army, and a chief engineer and two assistants for the Army. In December 1776, Congress authorized the raising and organization of a Corps of Engineers. Three years later, on 11 March 1779, Congress provided that all the "engineers in service . . . shall be formed into a corps of engineers" to report direct to General Washington and to the Board of War of the Continental Congress. Although some American officers, notably Richard Gridley and Rufus Putnam, had acquired experience during the colonial wars none had formal training in military engineering. Most Engineer officers with the Revolutionary forces were volunteers educated in the outstanding French military schools of the period. Construction of fortifications at West Point and of siege works at Yorktown were outstanding Engineer works during the American Revolution.

Various acts and resolutions following the peace settlement of 1783 alternately disbanded and reestablished the Corps of Engineers until the act of 16 March 1802. This act authorized the President of the United States "to organize and establish a corps of engineers . . . to be stationed at West

9 Mar 73

Point" and to "constitute a Military Academy." Since then the Corps of Engineers has been a permanent part of the Army. During and after the War of 1812 topographical engineers served as members of the general staff. When the headquarters of the Engineer Department moved from West Point to Washington, D. C. in 1818, it encompassed the Corps of Engineers, the Topographical Bureau, and the Military Academy. In 1831, however, the Topographical Bureau was separated from the Engineer Department and in 1838 it was organized as the Corps of Topographical Engineers. Topographical Engineers remained a separate Corps until an act of 3 March 1863 merged its functions and personnel into the Corps of Engineers. The Military Academy at West Point remained the responsibility of the Chief of Engineers until 1866 when Congress placed its supervision under the War Department at large under the direction of the Secretary of War.

In the early years of the nineteenth century West Point provided cadets with a broad technical background as well as a military education. Mathematics, natural science, and civil engineering were stressed. Until the late 1820's the Military Academy was the only engineering school in the country and its influence in this field was markedly felt for many years thereafter.

Because West Point graduates made up a significant portion of professional engineers, their services were in great demand, both from government agencies and from private enterprise, as the United States expanded westward. The General Survey Act of 1824 acknowledged this fact by authorizing the President "to cause the necessary surveys, plans, and estimates, to be made of the routes of such roads and canals as he may deem of national importance, in a commercial or military point of view, or necessary for the transportation of the public mail" and "to employ two or more skillful engineers, and such officers of the corps of engineers, or who may be detailed to do duty with that corps, as he may think proper . . ." During the nineteenth century Engineer officers surveyed and mapped large areas both in the interior and on the coast; located routes and superintended the construction of numerous roads, railroads, and canals; improved navigation in many rivers and harbors; and provided coastal defenses and lighthouses, and helped preserve and improve Yellowstone and other National Parks.

The Corps of Engineers has superintended the construction of many buildings in the nation's capital. Engineer officers were in charge of cutting through the Panama Canal. The Corps' flood control programs are of outstanding importance today. Tremendous dams furnish power for industry and water and electricity to agriculture.

Although Engineers have served with distinction in all the nation's wars, it was not until World War I that the Corps' numbers became a significant portion of the Army's strength. With 11,175 officers and 285,000 enlisted men, the Engineers composed 12 percent of the Army of World War I. Mobile

9 Mar 73

tactics and the truly global nature of the World War II conflict accelerated the demand for engineer combat and service activities. At peak strength the Engineers numbered over 700,000 or 8 percent of the World War II Army. Extensive use of mechanical equipment enabled Engineer troops to accomplish much greater tasks with relatively fewer men than in World War I.

Facilities to house and equip the Army of World War II demanded a construction program worth 15.3 billion dollars. Launched under the supervision of the Quartermaster Corps, construction of airfields was transferred to the Corps of Engineers in November 1940, and the entire program on 1 December 1941. In 1942 the Corps organized the Manhattan District for the development of the atomic bomb.

The post World War II military situation dictated the construction of worldwide defenses, which the Corps has constructed or contracted to private industry in such places as Europe, Africa, Middle East, Far East and Pacific and Atlantic Islands. Demand for the services of Engineer troops during the Korean conflict ran high, alternate repair and destruction of routes of communications being characteristic of the forward and retrograde movements marking this struggle.

In Vietnam Engineer troops built and maintained ports, depots, camps, airfields and heliports, roads and bridges, hospitals, and other facilities needed to support a force of a half million men. Their area of operations ranged from the South China Sea to the Cambodian border, and from the Mekong Delta to the DMZ at the 17th Parallel. They provided combat support to other combat arms and helped the ARVN Engineers attain a higher state of proficiency. Engineers in Vietnam were second in branch strength only to the Infantry.

In the last quarter century, the Corps has been assigned in addition to its continuing CONUS missions for the Army and Air Force, major functions in the nuclear power, ICBM, space, and postal construction programs and in civil defense and disaster recovery. Significant advances in the field of water resources development have also occurred during this period. Expanded programs, more comprehensive planning, and closer inter-agency coordination have keynoted the Corps' civil programs. Active for many years in the cause of conservation, Army Engineers have recently assumed a leadership role in the field of environmental protection.

The Chief of Engineers currently administers his civil and military missions through the decentralized organization described in the body of this regulation. Prior to 1888, however, civil and military construction and related matters were executed by designated officers of the Corps of Engineers in charge of specific works or projects and the improvement of rivers and harbors in designated areas who reported direct to the Chief of Engineers.

9 Mar 73

In December 1888 the Chief of Engineers, by General Orders No. 12, Headquarters, Corps of Engineers, divided the engineering works in his charge into five geographic divisions, namely Pacific Division, Northwest Division, Southeast Division, Southwest Division, and Northeast Division and required the officers in charge of executing the projects, the District Engineers, to report to the appropriate Division Engineer. Since that time the number and locations of Engineer Divisions and Districts has changed due to the type, volume and location of the work. However, this decentralized method of conducting operations is followed in the current organization and has become a basic policy of the Chief of Engineers.

On 11 March 1971, the Chief of Engineers signed an agreement with the Postmaster General, which indicated a desire on the part of the Postal Service to utilize the professional abilities and existing field organization of the Corps and a desire on the part of the Corps to provide these services. The Corps has been able to absorb the additional workload without adverse impact on other Corps programs, and thus has become the construction arm of the Postal Service.

The officers of the United States Army who have headed the administration of the activities of the Corps of Engineers, in the capacities indicated, since 1775, are listed below:

<u>Name</u>	<u>Highest Rank Held</u>	<u>Title</u>	<u>Date of Appointment</u>
Richard Gridley	Colonel	Chief Engineer, Continental Army	June 1775
Rufus Putnam	Colonel	Chief Engineer	5 Aug 1776
Louis DuPortail	Major General	Commandant of Engineers, Continental Army	22 Jul 1777 <u>1/</u>
Stephen Rochefontaine	Lt. Colonel	Commandant, Corps of Artillerists and Engineers	16 Feb 1795
Henry Burbeck	Lt. Colonel	" "	7 May 1798
Jonathan Williams	Colonel	Principal Engineer	1 Apr 1802 <u>2/</u>
Joseph G. Swift	Brigadier General	Chief Engineer	31 Jul 1812
Walker K. Armistead	Brigadier General	" "	12 Nov 1818

ER 10-1-1  
9 Mar 73

<u>Name</u>	<u>Highest Rank Held</u>	<u>Title</u>	<u>Date of Appointment</u>
Alexander Macomb	Major General	" "	1 Jun 1821
Charles Gratiot	Brigadier General	" "	24 May 1828
Joseph G. Totten	Major General	" "	7 Dec 1838 <u>3/</u>
		Chief of Engineers	3 Mar 1863
Richard Delafield M	Major General	" "	22 Apr 1864
Andrew A. Humphreys	Major General	" "	8 Aug 1866
Horatio G. Wright	Major General	Chief of Engineers	30 June 1879
John Newton	Major General	" "	6 Mar 1884
James C. Duane	Brigadier General	" "	11 Oct 1886
Thomas L. Casey	Brigadier General	" "	6 Jul 1888
William P. Craighill	Brigadier General	" "	10 May 1895
John M. Wilson	Brigadier General	" "	1 Feb 1897
Henry M. Robert	Brigadier General	" "	30 Apr 1901 <u>4/</u>
John W. Barlow	Brigadier General	" "	2 May 1901 <u>5/</u>
George L. Gillespie	Major General	" "	3 May 1901
Alexander MacKenzie	Major General	" "	23 Jan 1904
William L. Marshall	Brigadier General	" "	2 July 1908
William H. Bixby	Brigadier General	" "	12 June 1910
William T. Rossell	Brigadier General	" "	12 Aug 1913
Dan C. Kingman	Brigadier General	" "	12 Oct 1913
William M. Black	Major General	" "	7 Mar 1916 <u>6/</u>
Lansing H. Beach	Major General	" "	9 Jan 1920 <u>7/</u>
Harry Taylor	Major General	" "	19 June 1924

9 Mar 73

<u>Name</u>	<u>Highest Rank Held</u>	<u>Title</u>	<u>Date of Appointment</u>
Edgar Jadwin	Lieutenant General	" "	27 June 1926
Lytle Brown	Major General	" "	1 Oct 1929
Edward M. Markham	Major General	" "	1 Oct 1933
Julian L. Schley	Major General	" "	18 Oct 1937
Eugene Reybold	Lieutenant General	" "	1 Oct 1941 <u>8/</u>
Raymond A. Wheeler	Lieutenant General	" "	1 Oct 1945
Lewis A. Pick	Lieutenant General	Chief of Engineers	1 Mar 1949 <u>8/</u>
Samuel D. Sturgis	Lieutenant General	" "	17 Mar 1953 <u>8/</u>
Emerson C. Itschner	Lieutenant General	" "	1 Oct 1956 <u>8/</u>
Walter K. Wilson, Jr.	Lieutenant General	" "	19 May 1961
William F. Cassidy	Lieutenant General	" "	1 July 1965
Frederick J. Clarke	Lieutenant General	" "	2 Aug 1969

- 1/ General DuPortail was originally appointed to the position as Colonel and was promoted to Brigadier General on 17 November 1777.
- 2/ Colonel Williams was originally appointed to the position as Major and was promoted to Lieutenant Colonel on 19 April 1805.
- 3/ General Totten was appointed Chief Engineer as a Colonel. He was promoted to Brigadier General on 3 March 1863 and to Bvt. Major General on 21 April 1864.
- 4/ General Robert was appointed on 30 April 1901 and retired 2 May 1901.
- 5/ General Barlow was appointed on 2 May 1901 and retired 3 May 1901.
- 6/ General Black was originally appointed Chief of Engineers as a Brigadier General.
- 7/ General Beach did not report for duty in Washington as Chief of Engineers until 10 February 1920.
- 8/ Appointed Chief of Engineers as a Major General.